

Increasing shelf life of fruits, flowers

RESEARCH PAYS OFF:

Mardi's post-harvest technology has led to more exports of produce

PUNITHA KUMAR

SERDANG

punithak@nst.com.my

POST-HARVEST technology, including increased shelf life and minimal fruit processing by the Malaysian Agricultural Research and Development Institute (Mardi), has benefited the local horticulture industry.

Mardi Horticulture Research Centre senior principal research officer Latifah Mohd Nor said the technology was implemented because ready-to-eat fruits, vegetables and flowers perished within a few days.

"A short period of time serves the need for local marketing but it is insufficient for export where sea or air shipment is involved."

She said Mardi had initiated developing a post-harvest research plan several years ago which allowed extension of storage life, insect disinfection, transportation, modified packaging atmospheres and suitable packinghouse operations of perishable products.

"From our findings, a papaya can only last for a week under normal room temperature, but with proper harvesting, it can last between two and four weeks if kept between 10 and 13°C."

She also said fruits such as durians and bananas could last for a maximum of three weeks if kept under 10°C and 14°C degrees respectively.

Latifah said Malaysia had been sending fresh-cut pineapples and jack fruits to Dubai, Amsterdam, Zurich and Australia since 2006.

"The people of Hong Kong love durians and we ran a trial export in 2008 by using 20 footer reefer containers set at 10°C."

She said after six days of sailing, the king of fruits was still fresh and was even stored for another six days at a warehouse in



*Mardi senior principal research officer **Latifah Mohd Nor** says Malaysia has been sending fresh-cut pineapples and jack fruits to Dubai, Amsterdam, Zurich and Australia since 2006*

Kowloon, Hong Kong.

As for flowers, Latifah said chrysanthemum grown in Cameron Highlands were a hit in Japan, with more than 70 per cent of production being catered for foreign markets.

"The shelf life of these flowers can be maintained at four weeks if kept at 2°C, and this is sufficient time for transportation and market distribution."

She said the flower quality at retail outlets were maintained for 10 to 12 days at 25°C owing to the continuous cold chain applied during handling of the flowers from the farm to the consumers.

Currently, she said, her team was researching on developing suitable commercial handling for fresh-cut vegetables and its market distribution.

Today, Latifah will be presenting a paper titled "Sea shipment of ready-to-eat durians to Hong Kong" at the 7th International Postharvest Symposium 2012.

The five-day symposium, held at the Putra World Trade Centre, will see all aspects related to post-harvest handling of horticultural crops discussed and presented by experts from more than 50 countries.

The event was jointly organised by Mardi and Universiti Putra Malaysia.